



Mass Fatality Planning

Regional and State Resources

Do you have a plan?

When was your plan last reviewed?

What is in your plan?

Sources for Fatality guidance used in guidance/template:

Kansas City Region Mass Fatality Incident Annex

Advanced Practice Centers (APC) and published in a planning toolkit

at: [http://www.nhspi.org/wp-](http://www.nhspi.org/wp-content/uploads/2015/05/Managing-Mass-Fatalities-Toolkit-for-Planning.pdf)

[content/uploads/2015/05/Managing-Mass-Fatalities-Toolkit-for-Planning.pdf](http://www.nhspi.org/wp-content/uploads/2015/05/Managing-Mass-Fatalities-Toolkit-for-Planning.pdf)

Federal (DMORT) Disaster Mortuary Operational Response Team

FEMORS – Florida Emergency Mortuary Operations Response System

Feedback from MOMORT leadership team, SEMA and Coroners

PAST and POTENTIAL DISASTERS

- Natural disasters: Hurricane Katrina (1,464 deaths), Hyatt Regency walkway collapse on July 17, 1981 (114 deaths), Joplin MO Tornado (161 deaths), September 11, 2001 tragic events (nearly 3,000 deaths) and the bombing in Oklahoma City (169 deaths) have demonstrated that the fatality management infrastructure is vulnerable to overwhelming events.
- New Madrid Seismic Zone, Region VII plan estimate for 6.5/7 would result in 686 deaths and 14,434 injuries.
- Be prepared for the possibility of an influenza pandemic.

Primary Objectives of a Mass Fatality PLAN



- Ready the jurisdiction for managing a mass fatality event
- Identify roles of key organizations/individuals in Operations
- Determine command/control, activation of the plan
- Provide logistics info on supplies, equipment and facility requirements
- Provide information on infection control and health/safety hazards

Create a Planning Team



- Identify those that will serve on a planning team (Coroner/Medical Examiner, EMD, hospital, public health department, volunteer organizations)
- Coroner is the legal authority, defer to the coroner as the expert
- ESF-8 Public Health and Medical, some county health departments have selected Capability 5 (Mass Fatality Planning) as one of their focus capabilities.

Review your current Mass Fatality Annex

- County EMD/Coroner will have the most recent Mass Fatality Annex
- Identify strengths of the plan
- Identify areas for improvement
- Refer to planning tools
- County/Region Mass Fatality Plan/Annex Template - MO

Mass Fatality GIS Resource MAP

<http://arcg.is/1Sh4YRB>

Use as a planning tool to identify:

- Fatality trailers

20 body refrigerated trailer (7 in State)

24 body MERC cooling system, (3 in State, 2 warehoused/1 trailered, 1 in Ill)



- Recovery Caches (7)



- Funeral Directors

- Embalmers

STRUCTURE of the PLAN Template



- Purpose, Scope, Situation, Assumptions, Local/Region/State Resources
- Concept of Operations
 - Activation
 - Resource Request Process and Coroner Mutual Aid
 - Setting up a Temporary Morgue
 - Setting up a Victim Information Center
 - Guidelines for Recovery and Transportation, Reunification/Notification of Next of Kin
 - Responder Safety/Well Being
 - Plan De-Activation
- Organization/Assignment of Responsibilities
 - Coroner/Medical Examiner
 - Emergency Management Director (EMD)
 - MO MORT and State Emergency Management Agency (SEMA)

Appendices to the Fatality Plan

- Appendix A - Capacity of Local and Regional Resources
- Appendix B - Regional/State Fatality Resource Map
- Appendix C - Site Recovery From
- Appendix D - Checklist for Temporary Morgue Facility
- Appendix E - Checklist for Victim Information Center
- Appendix F - OSHA Safety Recommendations for Workers who Handle Human Remains

Appendix A: First Call Coroner/ME Office, Morgue, Funeral Home, Crematory

Category	Sub-category	Information
Facility (Coroner/Medical Examiner Office, Morgue, Funeral Home, Crematory)	Morgue	Address/phone
	Counties Served	
	Storage capacity	# of bodies
	Examination capacity	# of bodies
	Supplies/ HRP's	Qty.
	Power	Electric Generator Natural gas/propane Supply agreement
	Transport	Vehicles
Personnel	Staff	# of primary/# additional
Communications	Common	Telephone line
	Network	Internet access
	Radio	Police/Fire dispatch, VHF, HAM
Documents	EOP	Maintained by each county
	Agreements	MOU's or informal agreements With whom?
Additional Resources	Equipment	Morgue trailers, generators
Other Items		

Add Duplicate table(s) for Additional Coroner Offices, Morgues, Funeral Homes, and Crematories

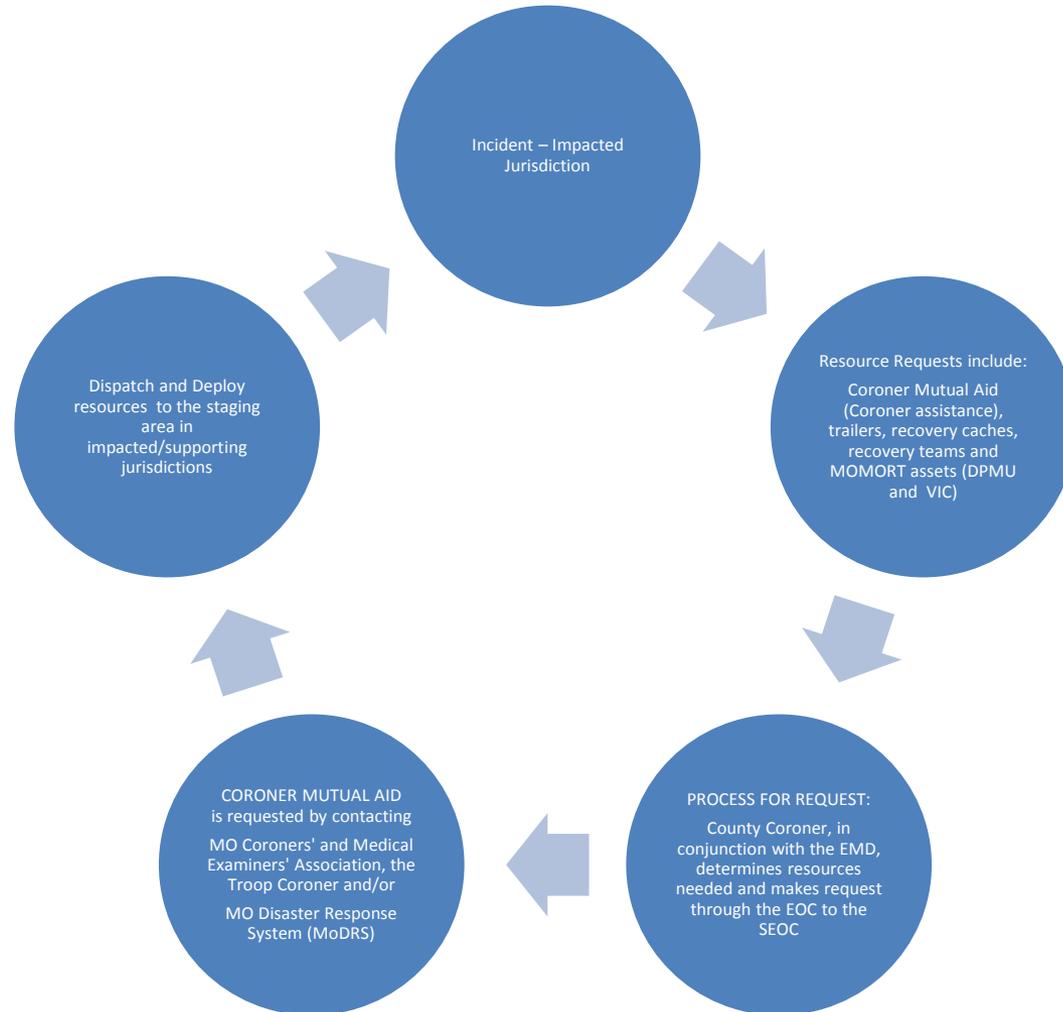
Missouri Systems Concept of Operational Planning for Emergencies

MOSCOPE, Annex E – Coroners Mutual Aid

- 1990, Missouri General Assembly established statewide fire mutual aid system for major emergencies/disasters.
- 2012 Mutual Aid plan was revised to include law enforcement and Emergency Medical Services (EMS).
- Sept. 2015, the plan added mutual aid assistance for coroners outlining the organizations responsible for coordinating mutual aid.
- 2 primary provisions: 1. Authority/Ability to request mutual aid without written agreement 2. Coroner/ME to appoint special duty coroner/ME for a period not to exceed 30 days.

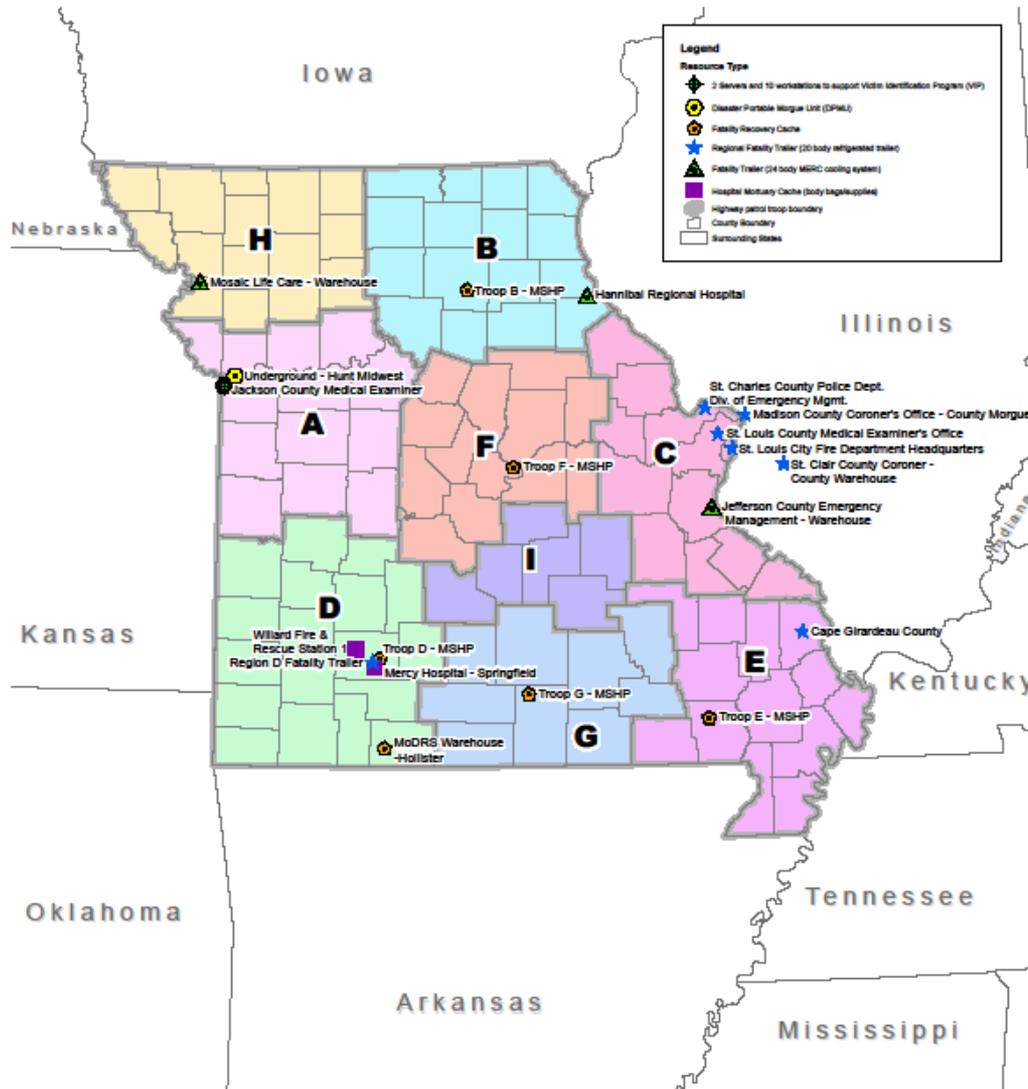
Resource Requests

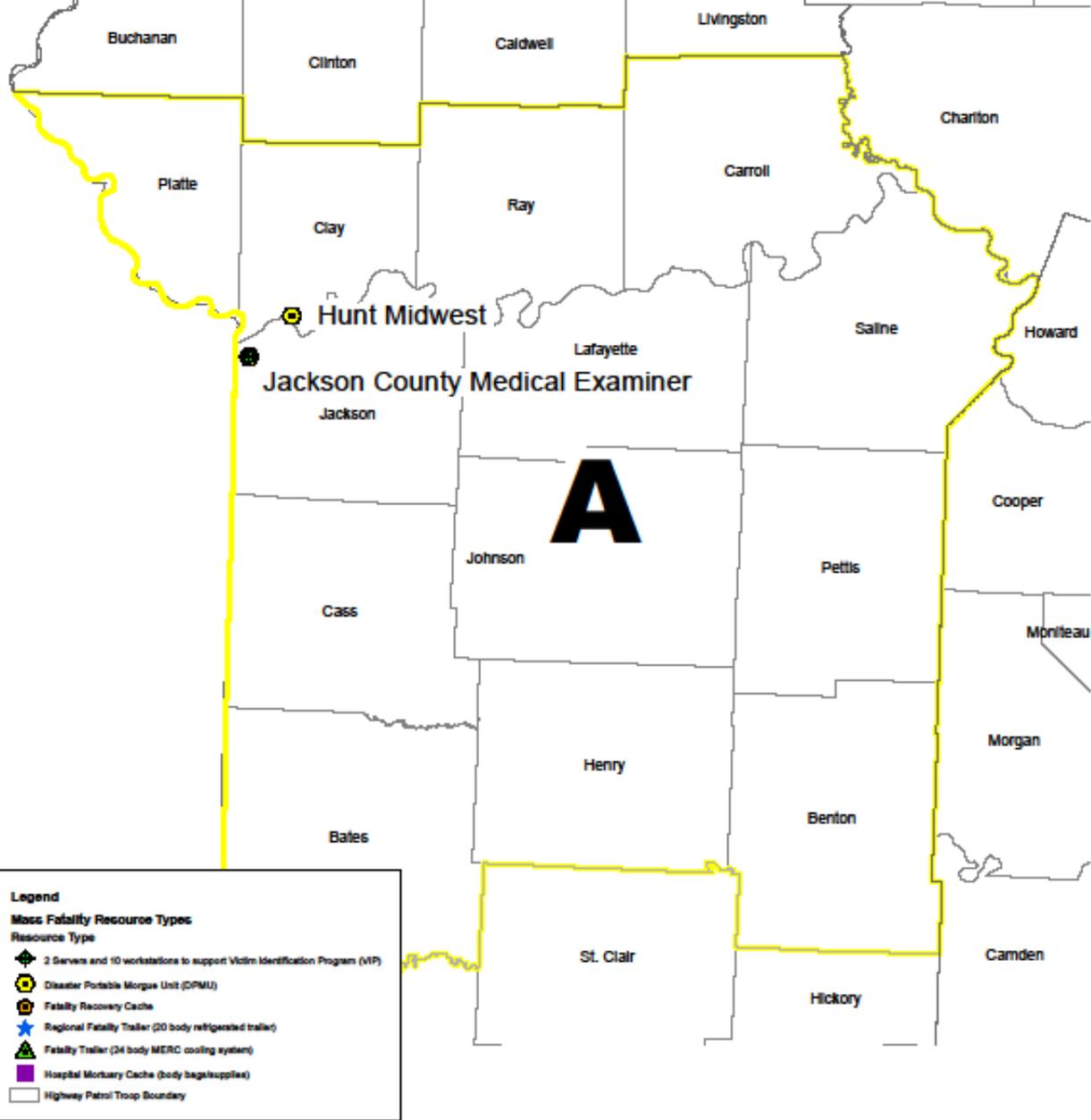
Coroner Mutual Aid





Mass Fatality Resources





Address	City	State	Zip	Type	Phone	Contact	Location Name
8000 NE Underground Dr, Suite 132C	Kansas City	MO	64161	Disaster Portable Morgue Unit (DPMU)	817-859-0501	Kevin Tweedy	Underground - Hunt Midwest
960 E 26th St.	Kansas City	MO	64108	Disaster Portable Morgue Unit (DPMU) and 14 refrigerated trailer	816-476-4340	Dr. Shane Peterson, Tom Hendey, Shaun Hachinsky	Jackson County Medical Examiner
960 E 26th St.	Kansas City	MO	64108	2 Servers and 10 workstations to support Victim Identification Program (VP)	816-476-4340	Dr. Shane Peterson, Tom Hendey, Shaun Hachinsky	Jackson County Medical Examiner

SEMA Telephone - (800) 298-6289 or (573) 526-9100
 State Emergency Management Agency



Site Recovery # _____

Victim

Incident _____

Incident Date _____

Site Recovery Form

Put N/A in all unused fields.

Recovery Date _____
 MM/DD/YYYY

Time: _____
 24 hour (0000)

Classification of Remains: _____
Choices: Complete HR (CHR), Fragmented HR (FHR)

Recovery Grid #: _____ **GPS of Recovery:** _____

Place / Address of Recovery: _____

Condition: select all that apply

- | | | | | |
|---|-------------------------------------|--|---|--|
| <input type="checkbox"/> Autopsied Previously | <input type="checkbox"/> Decomposed | <input type="checkbox"/> Mummified | <input type="checkbox"/> Skeletonized-Partial | <input type="checkbox"/> Wet-Environmental |
| <input type="checkbox"/> Burned-Partial Thickness | <input type="checkbox"/> Embalmed | <input type="checkbox"/> Saponified | <input type="checkbox"/> Skeletonized-Full | |
| <input type="checkbox"/> Burned-Full Thickness | <input type="checkbox"/> Fragmented | <input type="checkbox"/> Scavenged | <input type="checkbox"/> Viewable | |
| <input type="checkbox"/> Cremains | <input type="checkbox"/> Fresh | <input type="checkbox"/> Skin Slippage | <input type="checkbox"/> Non-Viewable | |

Description of Remains: _____

Position Remains Found In: _____

Estimated Age: Baby/Child Adolescent Young Adult Middle Aged Elderly No Estimate

Estimated Gender: Female Male Unknown **Estimated Race:** _____

Clothing on Remains: Yes No
 (brief description) _____

Personal Effects on Remains: Yes No
 (brief description) _____

Recovery Comments: _____

Presumptive FIELD ID: _____
 Last First Middle

ID Based On: DOB (MM/DD/YYYY) SSN ID# / Drivers license # / State

Recovered By: _____
 Name and Agency (if applies) Phone # Date Recovered Time Recovered

Delivered to Transport Staging: _____
 Name and Agency (if applies) Phone # Date Delivered Time Delivered

Site Recovery Report Completed by: _____
 Name and Agency (if applies) Phone #

Delivered to Morgue by: Agency _____ Phone # _____
 Name: _____ Date Delivered _____ Time Delivered _____

Appendix D: CHECKLIST for Temporary Morgue Facility

A possible facility must meet certain requirements for size, layout, and support infrastructure.

- ✓ Airplane hangars and abandoned warehouses have served well as incident morgues.
- ✓ Other facilities such as National Guard Armories, reception halls and fairground facilities may be options.
- ✓ Do NOT use school gymnasiums, public auditoriums, or similar facilities used by the general public.
- ✓ Facility should NOT have adjacent occupied office or work space.

Structure Type

- ✓ Hard, weather-tight roofed structure
- ✓ Separate accessible office space for Information Resource Center/Investigations
- ✓ Separate space for administrative needs/personnel
- ✓ Non-porous floors, preferably concrete
- ✓ Floors capable of being decontaminated (hardwood and tile floors are porous and not usable)

Size

- ✓ Minimal size of 10,000 – 12,000 square feet

Accessibility

- ✓ Tractor trailer accessible
- ✓ 10 ft. x 10 ft. door opening (loading dock access preferable or ground level access)
- ✓ Convenient to the scene
- ✓ Completely secure (away from families)
- ✓ Easy access for vehicles & equipment
- ✓ Limited Ingress/Egress to improve security

Electrical

- ✓ Electrical equipment using standard household current (110-120 volts)
- ✓ Power obtained from accessible on site distribution panel (200 amp service)
- ✓ Electrical connections to distribution panels made by local licensed electricians

Water Supply

- ✓ Single source of cold and hot water with standard hose big connection
- ✓ Water hoses, hot water heaters, sink and connector

Communications Access

- ✓ Existing telephone lines for telephone/fax capabilities
- ✓ Expansion of telephone lines may occur as the mission dictates
- ✓ Broadband Internet connectivity

Sanitation/Drainage

- ✓ Pre-existing rest rooms within the facility are preferable
- ✓ Gray water will be disposed of using existing drainage
- ✓ Biological hazardous waste, liquid or dry, produced as a result of morgue operations, will be disposed of according to local requirements

Adapted from DMORT standards at

<http://www.dmort8.org/DMORT%20NTSB%20SOP%20Nov%202006.pdf>



Adding Site(s) to the Plan

Temporary Morgue Site(s)			
Facility (Name/Address)	Point of Contact	Telephone Numbers	MOU/A's
1.			Yes/No
2.			Yes/No

List facility name, address, individual who serves as the point of contact and telephone numbers.



Appendix E

CHECKLIST for Victim Information Center (VIC) Facility

A possible facility must meet certain requirements for size, layout, and support infrastructure.

- ✓ Community centers, reception halls or hotels are preferred or similar facility used by the general public.

Structure Type

- ✓ Hard, weather-tight roofed structure
- ✓ Separate space for administrative needs/personnel

Size

- ✓ The amount of square footage depends on the size of the fatality incident.
- ✓ Approximately 10,000 – 12,000 square feet is needed.
- ✓ Physical space and layout should accommodate a large number of visitors. For every 1 missing person, there may be 8-12 family members arriving at the VIC.
- ✓ Designated areas are needed for specialized personnel as listed above.

Accessibility

- ✓ Handicap accessible
- ✓ Men and women restroom facilities
- ✓ Limited access/entrances, ability to conduct security operations
- ✓ Located miles away from the temporary morgue facility

Electrical/Communications Access

- ✓ Heating and cooling
- ✓ Electrical equipment using standard household current (110-120 volts)
- ✓ Power obtained from accessible on site distribution panel (200 amp service)
- ✓ Existing telephone lines for telephone/fax capabilities
- ✓ Expansion of telephone lines may occur as the mission dictates
- ✓ Broadband Internet connectivity

Adding Site(s) to the Plan

Victim Information Center Site(s)			
Facility (Name/Address)	Point of Contact	Telephone Numbers	MOU/A's
1.			Yes/No
2.			Yes/No

List facility name, address, individual who serves as the point of contact and telephone numbers.

OSHA FactSheet

Health and Safety Recommendations for Workers Who Handle Human Remains

Employers and workers face a variety of health hazards when handling, or working near, human remains. Workers directly involved in recovery or other efforts that require the handling of human remains are susceptible to bloodborne viruses such as hepatitis and HIV, and bacteria that cause diarrheal diseases, such as shigella and salmonella.

General Precautions

The following precautionary measures can help employers and employees remain safe and healthy while handling human remains.

Personal Protective Equipment

- **Hand Protection.** When handling potentially infectious materials, use appropriate barrier protection including latex and nitrile gloves (powder-free latex gloves with reduced latex protein content can help avoid reaction to latex allergies). These gloves can be worn under heavy-duty gloves which will, in turn, protect the wearer from cuts, puncture wounds, or other injuries that break the skin (caused by sharp environmental debris or bone fragments). A combination of a cut-proof inner layer glove and a latex or similar outer layer is preferable.
- **Foot Protection.** Footwear should similarly protect against sharp debris.
- **Eye and Face Protection.** To protect your face from splashes of body fluids and fecal material, use a plastic face shield or a combination of eye protection (indirectly vented safety goggles are a good choice if available; safety glasses will only provide limited protection) and a surgical mask.

Hygiene

- Maintain hand hygiene to prevent transmission of diarrheal and other diseases from fecal materials on your hands. Wash your hands with soap and water or with an alcohol-based

- Give prompt care to any wounds sustained during work with human remains, including immediate cleansing with soap and clean water. Workers should also be vaccinated against hepatitis B, and get a tetanus booster if indicated.
- Never wear PPE and underlying clothing if it is damaged or penetrated by body fluids.
- Ensure disinfection of vehicles and equipment.

Ergonomic Considerations

- Lifting or moving heavy objects, particularly when done repetitively, can result in injuries to the workers involved. Human remains that have been in water for some time are likely to be even heavier than normal. Having more than one person involved in lifting the human remains will help to reduce the potential for injury. Following appropriate lifting techniques will also help to protect people, as will the use of mechanical lifts or other devices when available.

Myths

- There is no direct risk of contagion or infectious disease from being near human remains for those who are not directly involved in recovery or other efforts that require handling the remains.
- Viruses associated with human remains (e.g., hepatitis B and C, HIV, various bacteria, etc.) do not pose a risk to someone walking nearby, nor do they cause significant environmental

Missouri Mortuary Operations Response Team (MO MORT)



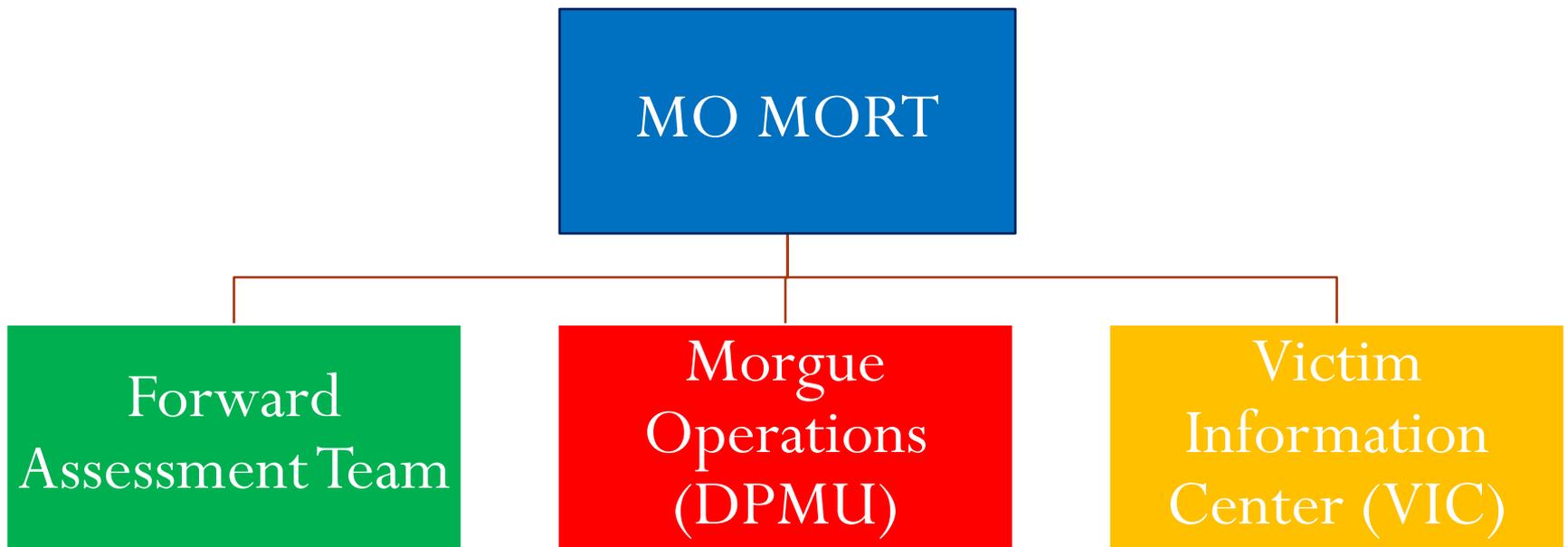
Statewide Team with Partnerships between the State Emergency Management Agency, Missouri Disaster Response System, local coroner's and medical examiner's, Missouri State Highway Patrol, Department of Mental Health , Show-Me Response and Community Mental Health Centers.

Team began in 2012

May 2014 Exercise, Kansas City, MO



Resources within MO MORT



Public Health Emergency Preparedness Grant Funded by Centers for Disease Control (CDC), MO Department of Health and Senior Services

- **15 Capabilities, Capability 5 is Fatality Management**
- **Definition:** Fatality management is the ability to coordinate with other organizations (e.g., law enforcement, healthcare, emergency management, and medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/ behavioral health services to the family members, responders, and survivors of an incident.
- **Functions and Associated Performance Measures:**
 - Function 1: Determine role for public health in fatality management
 - Function 2: Activate public health fatality management operations
 - Function 3: Assist in the collection and dissemination of ante mortem data
 - Function 4: Participate in survivor mental/behavioral health services
 - Function 5: Participate in fatality processing and storage operations

Continuing to Build the Team

- Depth of Expertise on the Team: Coroner's, investigators, mental health professionals and chaplains
- Planning and Coordination with STARR's Mass Fatality Sub-Committee and Kansas City Mortuary Operational Response Group (KCR MORG)

Contact Information

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